

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/693,575	10/19/2000	Djuphammar O. Hakan	253/099	8163	
24112	7590 01/30/2004		EXĄMINER		
COATS & BENNETT, PLLC			JUNTIMA, NITTAYA		
P O BOX 5 RALEIGH, NC 27602			ART UNIT	PAPER NUMBER	
KALEIGH, N	NC 27002		2663	Ch	
			DATE MAILED: 01/30/2004	4	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Α	application No.	Applicant(s)				
Office Action Summary			09/693,575		HAKAN, DJUPHAMMAR O.			
		<u></u> .	xaminer	Art Unit	T			
			littaya Juntima	2663				
	The MAILING DATE of this commun				ddress			
Period for Reply								
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status								
1)	_							
·	This action is FINAL . 2b)⊠ This action is non-final.							
3)	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims								
4) 🛛	☑ Claim(s) <u>1-60</u> is/are pending in the application.							
	4a) Of the above claim(s) is/are withdrawn from consideration.							
·	5) Claim(s) is/are allowed.							
	Claim(s) <u>1-60</u> is/are rejected.							
	Claim(s) is/are objected to. Claim(s) are subject to restrict	ation and/or o	laatian raquiramant					
	ion Papers	Mon and/or e	ection requirement.					
	The specification is objected to by th	o Evaminar						
· <u> </u>			\□ accepted or b\⊠	objected to by the Exami	iner			
,_	The drawing(s) filed on <u>19 October 2000</u> is/are: a) accepted or b) dobjected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.03(a).							
11)⊠ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority under 35 U.S.C. §§ 119 and 120								
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:								
	 Certified copies of the priority documents have been received. Certified copies of the priority documents have been received in Application No Copies of the certified copies of the priority documents have been received in this National Stage 							
application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.								
13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.								
 a) ☐ The translation of the foreign language provisional application has been received. 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific 								
reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.								
Attachment(s)								
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s)								
2) Notice	ce of Draftsperson's Patent Drawing Review (P mation Disclosure Statement(s) (PTO-1449) P	PTO-948) aper No(s) <u>3,8</u> .		Informal Patent Application (P				
					A bi			

Art Unit: 2663

DETAILED ACTION

Oath/Declaration

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because: it does not include the notary's signature, or the notary's signature is in the wrong place.

Drawings

- 2. (a) The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: (i) an antenna 502, (ii) duplexer 504, and (iii) an output line indicating an output IF from mixer 518 to mixer 516 are missing in Fig. 5, see page 5, lines 15 and 18, and page 9, lines 1-3 of the specification.
- (b) The drawings are also objected to because item 522 and 524 should be changed to "RFLO" and "IFLO," respectively, see page 8, lines 24-25 of the specification.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

3. The abstract of the disclosure is objected to because "dtat" in line 1 should be changed to "data." Correction is required. See MPEP § 608.01(b).

Art Unit: 2663

Claim Objections

- 4. Claims 22-23, and 55 are objected to because of the following informalities:
 - claim 22, line 1, "claim 18" should be changed to "claim 21;"
 - claim 23, line 1, "claim 19" should be changed to "claim 22;" and
 - claims 23 and 55, line 2, "BSC" should be spelled out as Base Station Controller.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 12-14 and 39-42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 12 and 39, the limitation "the receiver" in line 4 of the claims lacks antecedent basis. The office is treating the limitation as "the terminal."

In claims 14 and 41, the limitation "the second HDR carrier" in lines 3 and 5 of claim 14 and "the second best-effort carrier" in lines 3-4 of claim 41 lacks antecedent basis. The office is treating these limitations as "the HDR carrier" and "the best-effort carrier" for claims 14 and 41, respectively.

Art Unit: 2663

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 7. Claims 1-3, 7-9, 12-13, 15-16, 18-26, 29-34, 36-40, 42-43, 45-50, 53-56, and 59-60 are rejected under 35 U.S.C. 102(e) as being anticipated by Tran et al. (USPN 6,665,284 B1).

Per claims 1 and 24, Tran et al. teach a terminal (a mobile station 12 in Figs. 1 and 2), a HDR carrier /a best-effort carrier (read on an inherent HDR carrier that carries HDR data, i.e. non-voice and other data communication, col. 4, lines 65-67, col. 5, lines 57-62, see also col. 2, lines 21-25), a IxRTT/an all-service carrier (read on an inherent IS-95/IS-2000 carrier that carries IS-95/IS-2000 data, i.e. voice and other data communication, col. 4, lines 61-63, col. 5, lines 57-62, see also col. 2, lines 21-25 and col. 4, lines 67-col. 5, lines 7), (a) tuning the terminal to a HDR/best-effort carrier (col. 6, lines 18-20 and 29-31), (b) establish a packet data communication over the HDR/best-effort carrier using the terminal (because data is converted out of electromagnetic form and into electrical form by antenna transducers 62 and 74 of the mobile station 12 in Fig. 2 and various receive operations are performed on the signal containing HDR data, col. 6, lines 18-31 and 39-45, therefore, it is inherent that a packet data communication must be established by the mobile station 12, see also col. 6, lines 46-52), and (c) periodically tuning the terminal to an 1xRTT/all-service carrier for a limited time in order to check for incoming all-service communications (a limited time reads on the inherent time the

Art Unit: 2663

second RF receive portion of the mobile station 12 is tuned to a paging channel to detect a page signal for subsequent transmission of the IS-95/IS-2000 data, col. 6, lines 59-67).

Per claims 2 and 25, Tran et al. teach step (d) (col. 6, lines 67-col. 7, lines 1-9), and step (e) (col. 9, lines 10-13, see also col. 3, lines 11-14).

Per claims 3, 9, 26, and 34, since Tran et al. teach sending a requesting suspension of HDR service to the HDR network, and performing partial hard-handoff to tune the transmitter part of the mobile station 12 to be operable to the IS-95/IS-2000 service, (col. 8, lines 64-col. 9, lines 1-2), and returning to HDR services when the IS-95/IS-2000 communication session is completed, therefore, it is inherent that step (f) of sending a packet hand-over request from the terminal (12 in Fig. 1) to transfer the packet data communication from the HDR/best effort (HDR) carrier to the 1xRTT/all-service (IS-95/IS-2000) carrier, step (g) of handing the packet data communication from the HDR/best-effort (HDR) carrier over to the 1xRTT/all-service (IS-95/IS-2000) carrier, and step (h) of establishing the 1xRTT/all-service (IS-95/IS-2000) communication over the 1xRTT/all-service carrier, while maintaining the packet data communication over the 1xRTT/all-service carrier must be performed.

Per claims 7 and 32, Tran et al. teach a terminal (a mobile station 12 in Figs. 1 and 2), a HDR/best-effort carrier (read on an inherent HDR carrier that carries HDR data, i.e. non-voice and other data communication, col. 4, lines 65-67, col. 5, lines 57-62, see also col. 2, lines 21-25), an 1xRTT/all-service carrier (read on an inherent IS-95/IS-2000 carrier that carries IS-95/IS-2000 data, i.e. voice and other data communication, col. 4, lines 61-63, col. 5, lines 57-62, see also col. 2, lines 21-25), (a) tuning the terminal to a HDR/best-effort carrier (col. 6, lines 18-20 and 29-31), (b) establish a packet data communication over the HDR/best-effort carrier

Art Unit: 2663

using the terminal (because data is converted out of electromagnetic form and into electrical form by antenna transducers 62 and 74 of the mobile station 12 in Fig. 2 and various receive operations are performed on the signal containing HDR data, col. 6, lines 18-31 and 39-45, therefore, it is inherent that a packet data communication must be established by the mobile station 12, see also col. 6, lines 46-52), (c) while the packet data communication is in progress, tuning the terminal to an 1xRTT/all-service (IS-95/IS-2000) carrier (col. 6, lines 46-58), and (d) establishing 1xRTT/all-service (IS-95/IS-2000) communication on the 1xRTT/all-service (IS-95/IS-2000) carrier (col. 6, lines 67-col. 7, lines 1-9).

Per claims 8 and 33, Tran et al. teach (e) tuning the terminal (the mobile terminal 12 in Fig. 1) back to the HDR/best-effort (HDR) carrier when the 1xRTT/all-service (IS-95/IS-2000) communication is terminated in order to complete the packet data communication (col. 9, lines 10-13, see also col. 3, lines 11-14).

Per claims 12 and 39, Tran et al. teach a terminal (a mobile station 12 in Figs. 1 and 2), a HDR/best-effort carrier (read on an inherent HDR carrier that carries HDR data, i.e. non-voice and other data communication, col. 4, lines 65-67, col. 5, lines 57-62, see also col. 2, lines 21-25), 1xRTT/an all-service carrier (read on an inherent IS-95/IS-2000 carrier that carries IS-95/IS-2000 data, i.e. voice and other data communication, col. 4, lines 61-63, col. 5, lines 57-62, see also col. 2, lines 21-25), (a) periodically scanning for a HDR/best-effort (HDR) carrier (the frequency of the scanning is not defined, therefore, reads on the monitoring of the HDR channel in a continuation, e.g. every second, col. 9, lines 10-13), (b) tuning the terminal to an 1xRTT/all-service (IS-95/IS-2000) carrier (once the IS-95/IS-2000 communication is completed, it is inherent that the mobile station 12 in Fig. 1 will return back to its default mode

Art Unit: 2663

of HDR and periodically tuning to the IS-95/IS-2000 frequency band, col. 6, lines 59-62, see also col. 3, lines 11-14), (c) establishing a packet data communication on the 1xRTT/all-service (IS-95/IS-2000) carrier after tuning in step (b) (packet data communication is established when a page signal is detected, col. 6, lines 69-col. 7, lines 1-9), (d) periodically scanning for a HDR/best effort carrier once the terminal is tuned to the 1xRTT/all-service carrier (again, the frequency of the scanning is not defined, therefore, reads on the monitoring of the HDR channel in a continuation, e.g. every second, col. 9, lines 10-13), (e) if a HDR/best-effort (HDR) carrier is available, tuning the terminal to the HDR/best-effort (HDR) carrier (it is inherent that the mobile station 12 is retuned to the available HDR frequency and back to its diversity reception mode when the IS-95/IS-2000 communication is completed, col. 9, lines 10-13, see also col. 3, lines 11-14), (f) establishing the packet data communication on the HDR/best-effort (HDR) carrier (it is inherent that the packet data communication on the HDR frequency band will be established when there is HDR data to be communicated to the mobile station 12 in Figs. 1 and 2, col. 6, lines 18-20, 29-31, and 39-42).

Per claims 13 and 40, Tran et al. teach that the packet data communication on the 1xRTT/all-service carrier (IS-95/IS-2000) is terminated prior to step (e) (col. 9, lines 10-13).

Per claim 15, Tran et al. teach *a terminal* (a mobile station 12 in Figs. 1 and 2), *a*HDR/best-effort carrier (read on an inherent HDR carrier that carries HDR data, i.e. non-voice and other data communication, col. 4, lines 65-67, col. 5, lines 57-62, see also col. 2, lines 21-25), an 1xRTT/all-service carrier (read on an inherent IS-95/IS-2000 carrier that carries IS-95/IS-2000 data, i.e. voice and other data communication, col. 4, lines 61-63, col. 5, lines 57-62, see also col. 2, lines 21-25), a transceiver (a radio transceiver) configured to selectively tune to

Art Unit: 2663

a HDR/best-effort (HDR) carrier or to an 1xRTT/all-service (IS-95/IS-2000) carrier (Figs. 1 and 2, col. 6, lines 1-2, 7-10, 24-34, see also col. 4, lines 19-28), a processor (control apparatus 56 in Fig. 1) configured to tune the transceiver to the HDR (HDR) carrier for establishing packet data communications and to tune the transceiver to the 1xRTT (IS-95/IS-2000) carrier for establishing 1xRTT communications or packet data communications (col. 6, lines 1-6, 18-20, 29-34, 39-55, 67-col. 7, lines 1-9)

Per claim 16, Tran et al. further teach that the *processor* (control apparatus 56 in Fig. 1) is configured to periodically tune the transceiver (a radio transceiver) to the 1xRTT (IS-95/IS-2000) carrier to check for an incoming 1xRTT (IS-95/IS-2000) communication while a packet data communication is occurring over the HDR (HDR) carrier and to tune the terminal (the mobile station 12) to 1xRTT carrier and establish an 1xRTT communication over the 1xRTT carrier when an incoming 1xRTT communication is detected (col. 6, lines 1-6, 18-20, 29-34, 39-58, 67-col. 7, lines 1-9).

Per claims 18 and 45, Tran et al. teach that the processor (the control apparatus 56 in Fig. 1) is further configured to tune to an 1xRTT/all-service (IS-95/IS-2000) carrier, while a packet data communication is taking place over a HDR/best-effort (HDR) carrier, and establish an 1xRTT/all-service communication over the 1xRTT/all-service carrier (col. 6, lines 1-6, 46-55, 67-col. 7, lines 1-9).

Per claims 19, 22, 46, and 54, Tran et al. teach sending a requesting suspension of HDR service to the HDR network, and performing partial hard-handoff to tune the transmitter part of the mobile station 12 to be operable to the IS-95/IS-2000 service (col. 8, lines 64-col. 9, lines 1-2), and returning to HDR services when the IS-95/IS-2000 communication session is completed.

Art Unit: 2663

Therefore, it is inherent that *the processor* (the control apparatus 56 in Fig. 1, col. 6, lines 1-6)/each terminal (the mobile stations 12 in Fig. 1, col. 4, lines 55-60) must be configured to initiate a packet hand-over request in order to transfer packet data communication from a HDR/best effort (HDR) carrier to an 1xRTT/all-service (IS-95/IS-2000) carrier.

Per claims 20, 29, 36, and 47, Tran et al. teach that 1xRTT/the all-service (IS-95/IS-2000) communication includes at least one of the following: (a) a voice communication (col. 2, lines 21-25, col. 5, lines 57-62).

Per claims 21 and 53, as shown in Fig. 1, Tran et al. teat a wireless communication network (a communication system 10, col. 4, lines 61-67), an 1xRTT/all-service carrier (read on an inherent IS-95/IS-2000 carrier that carries IS-95/IS-2000 data, i.e. voice and other data communication, col. 4, lines 61-63, col. 5, lines 57-62, see also col. 2, lines 21-25) a HDR/best-effort carrier (read on an inherent HDR carrier that carries HDR data, i.e. non-voice and other data communication, col. 4, lines 65-67, col. 5, lines 57-62, see also col. 2, lines 21-25), (per claim 21 only) a plurality of terminals (mobile stations 10, col. 4, lines 55-60) configured to tune to the HDR (HDR) carrier for establishing packet data communications and to tune to the 1xRTT (IS-95/IS-2000) carrier for establishing 1xRTT (IS-95/IS-2000) communications or packet data communications (col. 6, lines 1-6, 18-20, 29-35, 39-42, 46-55), (per claim 53 only) a plurality of terminals (mobile stations 10, col. 4, lines 55-60) configured to periodically tune to the 1xRTT/all-service (IS-95/IS-2000) carrier to check for an incoming 1xRTT/all-service communication while a packet data communication is occurring over the HDR/best-effort (HDR) carrier and to tune to the 1xRTT/all-service carrier and establish an 1xRTT/all-service

Art Unit: 2663

communication over the 1xRTT/all-service carrier when an incoming 1xRTT/all-service communication is detected (col. 6, lines 1-1-2, 29-34, 39-42, 46-55, 65-col. 7, lines 1-9).

Per claims 23 and 55, as shown in Fig. 1 that the mobile station 12 is communicated with the PSTN 24 through a BSC 16 and Tran et al. further teach sending a requesting suspension of HDR service to the HDR network, and performing partial hard-handoff to tune the transmitter part of the mobile station 12 to be operable to the IS-95/IS-2000 service (col. 8, lines 64-col. 9, lines 1-2), therefore, it is inherent that each hand-over request must contain information about a target BSC associated with the 1xRTT/all-service (IS-95/IS-2000) that is the target of the hand-over.

Per claims 30, 37, 48, and 59, Tran et al. teach that the all-service carrier comprises an *IxRTT carrier* (read on an inherent IS-95/IS-2000 carrier that carries IS-95/IS-2000 data, i.e. voice and other data communication, col. 4, lines 61-63, col. 5, lines 57-62, see also col. 2, lines 21-25).

Per claims 31, 38, 49, and 60, Tran et al. teach that the best-effort carrier comprises an HDR carrier (read on an inherent HDR carrier that carries HDR data, i.e. non-voice and other data communication, col. 4, lines 65-67, col. 5, lines 57-62, see also col. 2, lines 21-25).

Per claim 42, Tran et al. teach that the all-service carrier comprises an 1xRTT carrier (read on an inherent IS-95/IS-2000 carrier that carries IS-95/IS-2000 data, i.e. voice and other data communication, col. 4, lines 61-63, col. 5, lines 57-62, see also col. 2, lines 21-25), and the best-effort carrier comprises an HDR carrier (col. 2, lines 21-25 and col. 5, lines 57-62).

Per claim 43, Tran et al. teach a terminal (a mobile station 12 in Figs. 1 and 2), a

HDR/best-effort carrier (read on an inherent HDR carrier that carries HDR data, i.e. non-voice

Art Unit: 2663

and other data communication, col. 4, lines 65-67, col. 5, lines 57-62, see also col. 2, lines 21-25), an IxRTT/all-service carrier (read on an inherent IS-95/IS-2000 carrier that carries IS-95/IS-2000 data, i.e. voice and other data communication, col. 4, lines 61-63, col. 5, lines 57-62, see also col. 2, lines 21-25), a transceiver (a radio transceiver) configured to selectively tune to a HDR/best-effort (HDR) carrier or to an IxRTT/all-service (IS-95/IS-2000) carrier (Figs. 1 and 2, col. 6, lines 1-2, 7-10, 24-34, see also col. 4, lines 19-28), and a processor (control apparatus 56 in Fig. 1) configured to periodically tune the transceiver (a radio transceiver) to the IxRTT/all-service (IS-95/IS-2000) carrier to check for an incoming 1xRTT/all-service (IS-95/IS-2000) communication while a packet data communication is occurring over the HDR/best-effort (HDR) carrier and to tune the terminal (the mobile station 12) to 1xRTT/all-service carrier when an incoming 1xRTT/all-service communication is detected (col. 6, lines 1-6, 18-20, 29-34, 39-58, 67-col. 7, lines 1-9).

Per claims 50 and 56, Tran et al. teach that the all-service (IS-95/IS-2000) carrier supports real-time (voice) and non-real-time (other data) services, and the best-effort (HDR) carrier supports only non-real-time (non-voice and other data) services (col. 2, lines 21-25).

Claim Rejections - 35 USC § 103

- 8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 2663

9. Claims 4-6, 10-11, 14, 17, 27-28, 35, 41, 44, 51-52, and 57-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tran et al. (USPN 6,665,284 B1).

Per claims 4, 10, 27 and 35, Tran et al. teach *step (i)* (col. 9, lines 10-13, see also col. 3, lines 11-14), but fail to teach step (j) and step (k). However, it would have been obvious to one skilled in the art to include step (j) of sending hand-over request from the terminal (the mobile station 12 in Fig. 1) to transfer the packet data communication from 1xRTT/all-service (IS-95/IS-2000) carrier to the HDR/best-effort (HDR) carrier and step (k) of handing the packet data communication over to the HDR/best-effort carrier from the 1xRTT/all-service carrier into the method of Tran et al. in order to suspend the 1xRTT/all-service (IS-95/IS-2000) data received on the second RF receive portion 68 from the 1xRTT/all-service network, tuning the transmitter part back to the HDR/best-effort (HDR) carrier, and putting the second RF receive portion 68 in Fig. 2 back in the default mode as a diversity receiver (col. 3, lines 11-14, see also col. 8, lines 64-col. 9, lines 1-2) when the 1xRTT/all-service communication is terminated.

Per claims 5 and 28, Tran et al. teach that the terminal (12 in Figs. 1 and 2) is configured to optionally establish the 1xRTT/all-service (IS-95/IS-2000) communication (col. 6, lines 29-34 and 39-42).

Per claims 6 and 11, Tran et al. teach that 1xRTT (IS-95/IS-2000) communication includes at least one of the following: (a) a voice communication (col. 2, lines 21-25, col. 5, lines 57-62).

Per claims 14 and 41, Tran et al. fail to teach step (g) and step (h). However, it would have been obvious to one skilled in the art to include step (g) of sending hand-over request from the terminal (12 in Fig. 1) to transfer the packet data communication from 1xRTT/all-service (IS-

Art Unit: 2663

95/IS-2000) carrier to the HDR/best-effort (HDR) carrier and step (h) of handing the packet data communication over to the HDR/best-effort (HDR) carrier from the 1xRTT/all-service carrier (IS-95/IS-2000) into the method of Tran et al. in order to suspend the 1xRTT/all-service (IS-95/IS-2000) data received on the second RF receive portion 68 from the 1xRTT/all-service (IS-95/IS-2000) network, tuning the transmitter part back to the HDR/best-effort (HDR) carrier, and putting the second RF receive portion 68 in Fig. 2 back in the default mode as a diversity receiver (col. 3, lines 11-14, see also col. 8, lines 64-col. 9, lines 1-2) when the 1xRTT/all-service (IS-95/IS-2000) communication is terminated.

Per claims 17 and 44, Tran et al. fail to teach the limitations as recited in the claim. However, Tran et al. teach that the control apparatus 56 in Fig. 1 controls operation of the respective parts 52 and 54 of the mobile station 12 (col. 6, lines 1-6), both RF receive portion can be tuned to the IS-95/IS-2000 channel and operate as a diversity receiver and HDR channel is monitored for a quick return to HDR services (col. 9, lines 5-8 and 10-13).

Therefore, it would have been obvious to one skilled in the art to configure the processor (the control apparatus 56 in Fig. 1) to tune to 1xRTT/all-service (IS-95/IS-2000) when HDR/best-effort (HDR) carriers are unavailable and to periodically scan for HDR/best-effort (HDR) carriers until one is available, and tune to a HDR/best-effort (HDR) carrier when one is available to bring the terminal (the mobile station 12 in Figs. 1 and 2) to the normal operation mode of Tran et al. (col. 3, lines 11-14).

Per claims 51 and 57, although Tran et al. fails to teach that the all-service (IS-95/IS-2000) is optimized for circuit switched services, and the best-effort (HDR) carrier is optimized for best effort packet data services, it is well known in the art the IS-95/IS-2000 carrier, which

Page 14

supports voice communication (col. 2, lines 21-25), is optimized for circuit switched services and

the HDR carrier (col. 2, lines 21-28), which supports high data rates, is optimized for best effort

packet data services in order to maintain voice service quality and provide high data rate

transmission, respectively.

Per claims 52 and 58, although Tran et al. fails to explicitly teach the limitation recited in

the claim, an examiner notice is taken that it is well known in the art that the control and data

channel in the best-effort (HDR) carrier are time multiplexed.

Conclusion

Any inquiry concerning this communication or earlier communications from the 10.

examiner should be directed to Nittaya Juntima whose telephone number is 703-306-4821. The

examiner can normally be reached on Monday through Friday, 8:00 A.M - 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Chau Nguyen can be reached on 703-308-5340. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is 703-306-0377.

Nittaya Juntima January 23, 2004

CHAU NGUYEN SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 2600

Chow Tikhuyu